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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,957

07/08/2003

So-Hyun Kim

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EXAMINER

MILLER, BRANDON J

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/614,957

Applicant(s)

KIM, SO-HYUN

Examiner

Brandon J. Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213..

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrmann et al. (US 7,050,415 B2) in view of Peisa (US 6,826,193 B1).

Regarding claim 1 Herrmann teaches a method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system (see col. 1, lines 26-29 and col. 2, lines 59-61). Herrmann teaches selecting at a medium access control (MAC) layer an initial TFC by preferentially allocating a maximum packet data unit (PDU) value to a transmission channel on which a logic channel having a relatively high priority among a plurality of transmission channels has been mapped, the allocating achieved by analyzing the received TFS information and the TFCS information (see col. 5, lines 16-19 & 43-55 and col. 6, lines 41-48). Herrmann teaches transmitting from the MAC layer to a radio link control (RLC) layer the initial PDU value including respective logic channels by allocating an initial PDU value according to the initial TFC to the respective logic channels (see col. 4, lines 40-45 and col. 5, lines 43-52, transport set at beginning of a transmission time relates to initial TFS and packet data units already assigned relates to initial PDU). Herrmann teaches receiving at the RLC layer an initial PDU value, and setting the initial PDU value as a final PDU value (see col. 7, lines 42-

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47). Herrmann does not specifically teach transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission. Pesia teaches transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission (see col. 5, lines 8-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission because Herrmann teaches a radio resource control layer and the combination would allow for improved indication of a selection process for finding a suitable transport format combination.

Regarding claim 2 Herrmann teaches determining at the MAC layer a mapping status of the logic channels for the respective transmission channels, and determining a priority of the respective logic channels (see col. 5, lines 16-28). Herrmann teaches selecting among the TFCS the TFC that allocates the maximum PDU value to the transmission channel on which the logic channel having the highest priority is mapped (see col. 5, lines 43-56). Herrmann teaches re-selecting among selected TFCs the TFC that allocates the maximum PDU value to the transmission channel on which the logic channel having the next-to-highest priority is mapped if a plurality of TFCs are selected (see col. 5, lines 56-60). Herrmann teaches repeating a step until one of the TFCs is selected, and if one of the TFCs is selected, setting the TFC as the initial TFC (see col. 5, lines 61-67 and col. 6, lines 1-3 & 41-48).

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Regarding claim 3 Herrmann teaches allocating at the MAC layer the initial PDU value according to the initial TFC to the corresponding transmission channel (see col. 4, lines 40-45 and col. 5, lines 43-52, transport set at beginning of a transmission time relates to initial TFS and packet data units already assigned relates to initial PDU). Herrmann teaches allocating the allocated initial PDU value to the logic channel having the highest priority among the logic channels mapped on the respective transmission channel and transmitting the initial PDU value allocated to the logic channel to the RLC layer including the logic channel (see col. 5, lines 43-53).

Regarding claim 4 Herrmann teaches comparing at the RLC layer the received initial PDU value and a maximum transmission amount of a transmission buffer provided in the RLC layer, and if the initial PDU value is larger than the maximum transmission amount, the RLC layer sets the maximum transmission value as the final PDU value, while if the initial PDU is smaller than the maximum transmission amount, it sets the initial PDU value as the final PDU value (see col. 4, lines 40-45 & 55-64 and col. 7, lines 28-46, packet data units already assigned relates to initial PDU).

Regarding claim 5 Herrmann teaches receiving at the RLC layer the initial PDU value transmitted to the MAC layer where the initial transmission data is generated along with buffer occupancy information of a transmission buffer by dividing or combining the initial transmission data according to the set final PDU value during the generation of the initial transmission data; and setting the received initial PDU value as the final PDU value (see col. 4, lines 55-64 and col. 7, lines 42-46).

Regarding claim 6 Herrmann teaches a method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system (see col. 1, lines 26-29 and col. 2, lines 59-61). Herrmann teaches selecting at a medium access control (MAC) layer an initial TFC using the received TFS information and the TFCS information, allocating an initial PDU value according to the initial TFC to the logic channels mapped on the corresponding transmission channel (see col. 4, lines 40-45, col. 5, lines 43-52, and col. 6, lines 41-48, transport set at beginning of a transmission time relates to initial TFS and packet data units already assigned relates to initial PDU). Herrmann teaches transmitting the initial PDU value to a radio link control (RLC) layer including the respective logic channels (see col. 4, lines 54-66 and col. 5, lines 43-52). Herrmann does not specifically teach transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission. Pesia teaches transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission (see col. 5, lines 8-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission because Herrmann teaches a radio resource control layer and the combination would allow for improved indication of a selection process for finding a suitable transport format combination.

Regarding claim 7 Herrmann teaches a method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system (see col. 1,

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lines 26-29 and col. 2, lines 59-61). Herrmann teaches selecting an initial TFC by analyzing the received TFS information and the TFCS information (see col. 4, lines 41-45 & 54-56, transport block set at the beginning of a transmission time interval relates to initial TFC). Herrmann teaches preferentially allocating a maximum packet data unit (PDU) value to a transmission channel on which a logic channel having a relatively high priority among a plurality of transmission channels has been mapped, allocating an initial PDU value according to the initial TFC to the logic channels mapped on the corresponding transmission channel (see col. 5, lines 16-19 & 43-55 and col. 6, lines 41-48, packet data units that were already assigned relates to initial PDU). Herrmann teaches transmitting the initial PDU value to a radio link control (RLC) layer including the respective logic channels (see col. 4, lines 54-66 and col. 5, lines 43-52). Herrmann does not specifically teach transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission. Pesia teaches transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission (see col. 5, lines 8-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include transmitting from a radio resource control layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission because Herrmann teaches a radio resource control layer and the combination would allow for improved indication of a selection process for finding a suitable transport format combination.

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Response to Arguments

Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Belaiche et al. Pub. No.: US 2002/0136181 A1 discloses a method for selecting a combination of transport formats for transport channels in a mobile station and corresponding mobile station.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



July 23, 2007



GEORGE ENG
SUPERVISORY PATENT EXAMINER